Application of retrograde pedal access, transcollateral and pedal-plantar loop approach in a young CLI patient with all BTK total occlusions

Jae-Hwan Lee, MD, PhD

Cardiovascular Center in Chungnam National University Hospital

Pedal-plantar loop access

ATA proximal
Peroneal
ATA distal
Dorsalis
Transmetatarsal
Retrograde pedal access
Case (F/34)

- 1PY Ex-smoker, smoking cessation 1YA
- Left 2nd toe gangrene and intractable pain for 1 month
- Failed left ATA CTO intervention at other hospital
- Marker for CTD; all negative
Failed ATA recanalization at the outside hospital
 - Antegrade approach
Skin Perfusion Pressure (SPP)

- Right Ankle - Anterior: 38 mmHg
- Left Ankle - Anterior: 36 mmHg
- Right Foot - Dorsal: 51 mmHg
- Left Foot - Dorsal: 19 mmHg
- Right Foot - Medial Plantar: 87 mmHg
- Left Foot - Medial Plantar: 36 mmHg
The 1st Intervention
- Lt. femoral approach, 6Fr Ansel sheath

Medial plantar artery
- The only landing zone
Retrograde approach for PTA long CTO
- Retrograde access via medial plantar artery

Medial plantar artery

7cm, 21G needle

Venous advancement

Spasm & scanty plantar filling → DSA guidance needed
Regalia + Armada XT OTW Balloon

Command ES + CXI

2.0/2.5x210mm balloon
Navigation for lateral plantar flush occlusion

Invisible lateral plantar ostium
Pedal-plantar loop access
Final angiogram after 1st Intervention

2 weeks later
Improved pain
Healing ulcer
But, Recurred pain and gangrene 1 month after 1st intervention → The 2nd & 3rd intervention at 1 & 6 months

Pedal-plantar Loop access (ATA→ PTA)

Prolonged balloon dilatation
But, slow flow persistent
Lesion remained > 1 year, but resting pain improved

At 3 months

At 6 months

At 1 year
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For Making Good Footprints

Thanks for the Time
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